

Standard Operating Procedure Example

Date: 2/10/2018

SOP Title: Safe use of concentrated nitric acid

Principal Investigator: Dr. Alfred Nobel

Trainer: Dr. Alfred Nobel Trainer Signature: _____

AI N Room and Building: ET 249

Office and/or Laboratory Phone Number: (562) 985 4544

Section 1 – Process

Preparing diluted aqueous nitric acid solutions.

Section 2 – Hazardous Chemicals

Concentrated nitric acid (HNO₃), diluted nitric acid preparations.

Concentrated nitric acid (70.4%, 15.9M) is a colorless to slightly yellow, strong oxidizing inorganic acid.

edge of the fume hood. Hood should be cleared of organics, flammables, and other incompatible substances.

Section 6 – Special Handling Procedures and Storage Requirements

Store nitric acid in tightly closed containers, in a well ventilated area away from organic substances, caustic materials, and combustible materials. Store containers of nitric acid in secondary containment. Bottles of acid should be stored in an acid (corrosive) cabinet. While acids and bases are both considered to be corrosive, care must be taken to not store acids and bases in the same cabinet.

Oxidizing acids, such as nitric should be stored separately, in a secondary container within an acid cabinet.

Glacial acetic acid, although it is both a corrosive and flammable, should be stored with other, non oxidizing acids segregated away from nitric or other oxidizing acids. Store in a flammables cabinet if oxidizing acids are present in the Corrosives Cabinet.

Section 7 – Personal Protective Equipment

Chemical splash goggles: Wear chemical splash goggles with face shield when using quantities > 1 liter (L), or chemical splash goggles when using quantities < 1L.

Gloves: Neoprene to ba

